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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/585,762

06/02/2000

Dirk Van Hyning

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08/14/2003

MILLIKEN & COMPANY
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EXAMINER

WACHTEL, ALEXIS A

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/585,762

Applicant(s)

HYNING, DIRK VAN

Examiner

Alexis Wachtel

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Detailed Action

1. Applicant's amendment and accompanying Remarks filed 5-20-2003 have been entered and carefully considered.

The amendment is sufficient to overcome the 112 1st and 112 2nd paragraph rejections of claims 1-16 due to Applicant's amendment. Claims 1-16 are cancelled without prejudice. Claims 17-32 were added for consideration.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17-32 rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,849,311 to Sawan et al in view of US 5,432,000 to Young, Sr. et al.

Sawan et al disclose a contact-killing coating on a substrate (Col 4, lines 21-26) wherein the biocidal material used is of a metallic material, wherein the metallic material can be a metal, metal oxide, metal salt, metal complex, metal alloy or mixture (Col 3, lines 47-52). Metals that can be used include silver, zinc, cadmium, lead, mercury, antimony, gold, aluminum, copper, platinum and palladium, their salts, oxides, complexes, and alloys. (Col 3, lines 47-60). Said metallic material is in particulate form that is dispersed in an emulsion (Col 4, lines 1-5). The emulsion or suspension includes a crosslinking agent (Col 4, lines 5-17) which together with the emulsion broadly

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constitutes a binder. Said contact-killing coating can be used on wound dressing, personal hygiene products, household products, food preparation surfaces and packaging, water storage, treatment and delivery systems, biosensitive systems lab equipment (Col 12, lines 32-40) as well as surgical gloves (Col 1, line 67).

Conventionally, wound dressings are woven or nonwoven, food packaging materials and surgical gloves are films and personal hygiene products such as diapers have non woven materials as well as film layers that could be coated with said contact-killing coating. Inherently, if contact-killing coating is applied to a woven or nonwoven, at least some yarns or fibers will be coated completely.

Sawan et al fail to teach the use of a binder having the claimed properties. Young teaches that binders having good intermolecular contact between the binder and particles are especially desirable. (Col 11, lines 19-21). Young discloses that such desirable binders used in emulsion form include polyesters, polyimides, melamine/formaldehyde, epoxy and other binder materials (Col 9, lines 35-67, Col 10, lines 1-19). In view of this teaching it would have been obvious to one of ordinary skill to have used any of the binders disclosed by Young instead of the binder disclosed by Sawan et al since the binders disclosed by Young are equivalently useful and are more available or cost effective.

Although Sawan et al and Young fail to explicitly teach the claimed percentage of biocidal coating integrally retained on substrate after the claimed number of washes, claimed log kill rate, or that the binder material used is susceptible to attack by a standard laundering additive selected from the group constituting of detergents,

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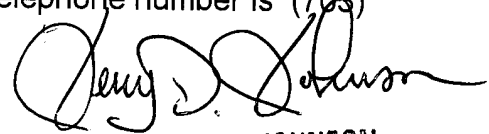
solvents, bleaches or mixtures thereof and is not susceptible to degradation due to exposure to exposure to high temperatures associated with standard laundry drying temperatures, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. metallic biocidal suspension or binder applied to a substrate) and in the similar production steps (i.e. coating said biocidal binder to a substrate) used to produce the biocidal coated substrate. The burden is upon the Applicant to prove otherwise.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Glenn Caldarola can be reached at (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)



JERRY D. JOHNSON
PRIMARY EXAMINER
GROUP 1100